

Florian Stammler: The Commoditisation of Reindeer Herding in Post Soviet Russia: Herders, Antlers and Traders in Yamal.

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The Commoditisation of Reindeer Herding in Post Soviet Russia: Herders, Antlers and Traders in Yamal

Florian Stammler

Velvet antlers, in Russian “*panty*”,¹ have a long tradition as a medicine in Asia. According to old Chinese sources, the extract of velvet antlers “reduces hot temperedness, dizziness, strengthens male kidneys and testicles, cures involuntary ejaculation of male semen during sexual intercourse with a ghost during the sleep” (quoted in Iudin 1993:3). This sounds like healing from the medieval idea *sacubus*, the female ghost lying on a sleeping man. Today many people in Asia believe in the mysterious qualities of velvet antler extract for male sexual performance and in its strengthening a person’s overall condition.

In this paper, I draw the connection between these “believers” as potential customers and the reindeer herders as the “producers” of this mysterious medicine, “*panty*”; in Siberia, who mostly are “non-believers”. I show that the growing importance of national and international trade in this commodity affects the way of life of the arctic reindeer nomads, and it affects how they react to their integration into a network of worldwide exchange. I argue that it is mainly because of the interest in this commodity, “*panty*”, that we can talk about what I call the globalisation of reindeer herding. I investigate the history and impact of this commodity, and my argument is that their increasing connection to world markets has not resulted in significant marginalisation of reindeer herding, nor did it turn upside down the other factors in reindeer herding, such as migration, meat production, and subsistence.

¹ Although being aware of the English meaning of this term, I would like to encourage the reader to accept this as the Russian “terminus technicus” throughout this contribution.

1. *Fresh velvet antlers: Historical-biological background*

Originally, “*panty*”, velvet fresh antlers, were not an invention of the North. Before Perestroika, the southeast Asian markets were satisfied mostly with raw material coming from New Zealand, and from poached animals of different origins. Within Russia, the most important source animal for this raw material are marals (*Cervus elaphus maral*) in the Altai mountains. Harvesting “*panty*” from marals we know from the early 1930s on. However, the quantity produced there was rather minimal (Iudin 1993:5).

The Soviet state planners had an ambiguous relation to this animal product. On the one hand, in the Russian Far East, state- or collective farms started in 1971 to produce reindeer “*panty*”, approximately 8 tons per year (Iudin 1993:6). In Soviet laboratories in Magadan and Yakutsk research had been carried out on proving the medicinal effects of “*panty*” extract, “on the basis of experience of Tibetan and Chinese traditional medicine” (Iudin 1993:5). This is true for both reindeer and for maral “*panty*”. The relevant ingredient in these fresh antlers is called “*pantocrine*”, and sometimes for reindeer “*rantarine*”. “*Panty*” from northern reindeer are identical in their ingredients with “*panty*” from other deer and marals, with the only difference being that they have half the saccharin of more southern antlers. “*Panty*” are rich in amino-acids and many other relevant elements, analysed in detail by Russian scholars (see Iudin 1993:63–69). Research about the medical effects still is very unsatisfactory. So far we know that giving pantocrine to mice over a long period results in an increase of testosterone, and of protein in their liver. We know that in humans their performance on an velo-ergometer increases when they consume “*pantocrine*” over a long period. (Iudin 1993:66). Research has also shown, according to Russian sources that “*panty*” indeed reduce sleeping problems, headaches and dizziness (Iudin 1993:73).

On the other hand, Soviet authorities were very sceptical about the “*panty*” trade. Their main argument was that selling “*panty*” to Chinese is sharlatanery, and the business was being done to cheat the Chinese people (Iudin 1993:6).

However, economic reforms in China created a greater demand for this kind of product, and perestroika in the Soviet Union permitted a establishment of extensive trade networks between South East Asian countries and Russia. It was only after perestroika that “*panty*” became significant as a

source of income for reindeer herders. In contemporary Russia, *panthrocrine* is sold as having similar effects as *Echinacea*, strengthening the overall condition of the human body.² Apart from medical preparations, in China and other Asian countries “*panty*” are also consumed as dried chips in expensive restaurants.

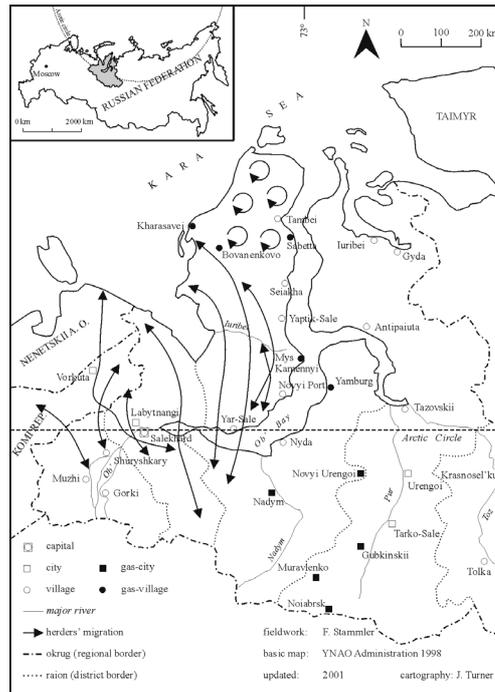
2. *The North as a producer of the raw material*

Harvesting velvet antlers from northern reindeer on a larger scale began rather late. Although the first Chinese bought reindeer “*panty*” as early as 1910 (Iudin 1993:62), real production only started in the 1970s, and this mostly in state farms in the far east of Russia, in rather small quantities.

The real boom began in the beginning of the 1990s, when the limits on entrepreneurial activities in the Soviet Union fell, and simultaneously the need for additional income increased because of the lack of state support. Since West Siberia was the only region in the former Soviet Union to experience growth of domestic reindeer after the end of the planned socialist economy, it was here where building up a velvet antler trade network was most promising.

The Yamal-Nenets Autonomous region, where I did my fieldwork, today has the world’s biggest herds of domestic reindeer, counting 540000 animals all together. It is also the number one gas producing region in Russia. In comparison to the income from gas exports, the economic importance of reindeer herding is close to nothing. However, for the approximately 10000 mostly indigenous people directly occupied with herding reindeer on the tundra, this is their basic means of subsistence and their main means of income, as well as an important symbol of ethnic identity. All the reindeer herding is done in a highly mobile way, with herders performing extensive migrations varying from 100 to more than 1000 km a year. Whereas in Pre-Soviet and Soviet times, reindeer herding was done mainly for subsistence and for production of meat and transport, today many reindeer herders say that producing “*panty*” has become at least equally important for their income as producing meat. This changing economic orientation of the reindeer herders influences their day to day interactions with their animals, as I shall show below.

² See e. g. the instructions for use for “*cigapan*”, which can be purchased in pharmacies in Russia.



Map 1: The Yamal-Nenets Autonomous Okrug, Northwest Siberia, Russia

3. Velvet antler production: an ethnographic account

Velvet antler (“*panty*”) production is closely interlinked with the seasonal nomadic cycle of the reindeer herders:

In spring most reindeer herders migrate with their herds towards the summer pastures in the North of the Yamal peninsula (see map 1). This is the time when the antlers start to grow. Reindeer (*rangifer tarandus*) is the only animal where both of male and female reindeer grow antlers, and also bulls and castrated bulls. This makes reindeer, unlike other deer, an exploitable raw material for “*pantocrine*”.

Depending on the weather and the quality of the pastures, the antlers reach their full size, up to 50 cm, towards the middle or the end of June. After this, for approximately 4 weeks, is the optimal time for cutting the fresh antlers off the deer. Usually, it is done a bit later than this ideal time suggests, from mid-July to mid-August.



Fig. 1: “*Panty*” of a private reindeer herder in North Yamal in their growing period, beginning of June.

The process of cutting the antlers is very time consuming, and turned the summer, from the rather calm season that it had been for reindeer and herders, to a sometimes very busy period: The deer have to be driven to a self-made corral in the tundra, and the “*panty*” animals have to be chosen and separated from the rest of the herd, either by lassoing them or by rounding them up in front of the nomadic camp. Most herders choose to cut antlers only from castrated bulls or those bulls that are not considered to have very good reproductive capacities. Reproductive bulls are considered to be weakened unnecessarily by “*panty*” cutting, and females should have their antlers because they will need them when competing for the best pastures in autumn and winter, and they should not be stressed too much since their main task is feeding the calves that usually are born 2–3 months before the “*panty*” harvest. The cutting itself is done jointly by several herders per deer, since one or two men have to keep the animal calm while one is sawing the antlers. Ideally, after the cut, the wound which is normally bleeding is treated with a bandage and iodine to stop bleeding and keep the wound clean.

The most important challenge in the whole process is getting the raw material for the commodity “*panty*” within the time schedule. The success of the whole production depends on the interaction between the reindeer herders and the enterprise collecting the cut antlers. The later “*panty*” are cut, the more bone they contain, which means a decrease in quality and a

reduction in the price. Therefore, the younger the antlers are, the better. Secondly, “*panty*” have to be collected as soon as possible after the cutting, in one or two days. Otherwise they begin to rot. This is why the ‘producers’ (i. e. reindeer herders) and the ‘collectors’ (i. e. traders) have to agree on an exact date for cutting and collecting the “*panty*”.

I will give one example of a herding family where I stayed in the summer of 2001 to illustrate this process: Anniko and his family have a mid-size reindeer herd of slightly more than 1000 reindeer in North Yamal. In June, the antlers are already quite well developed, and they know that soon the helicopter will come. What the collecting enterprise normally does is to fly by helicopter to every reindeer herders camp preliminary to agreeing on an exact date for the collection of “*panty*”. Imagine the local knowledge of the land possessed by those who direct the helicopters: They have to know where several hundred nomadic camps are situated in the tundra on any given day. So they fly to Anniko to ask him how many kg of “*panty*” he wants to cut this year. He answers 300 kg. Then Anniko chooses from the goods in the helicopter offered by the trader: fresh bread of the day, tea, tobacco, noodles, spices, newspapers, books, rubber boots, and other items. During this first flight, the enterprise brings to the tundra a variety of the most common goods, which reindeer herders normally buy. Anniko and all herders get these goods in advance, before having cut the antlers. The entrepreneur writes the price of the purchase in his account book, and when the “*panty*” are collected, he counterbalances the given “*panty*” (payment) against the sold goods, and sees whether there are debts or profits. The first visit of the trading helicopter is the occasion for the herders to order more or different goods. The entrepreneur writes down the order and the prices.

This first flight is necessary because most private camps are not connected by any means of telecommunication. Only through personal communication does an entrepreneur know what his customers would like to buy this summer, how many kg of “*panty*” they want to sell, and on exactly which date he will be able to collect the “*panty*”. Cash at this stage does not play any role. The whole pricelist of goods is calculated in kg of “*panty*”. During the first visit of the trader, no “*panty*” are collected, since they are not cut yet. This is the main purpose of the second helicopter flight one or two days after the reindeer herders have cut and packed the “*panty*” in linen sacs. Only then will Anniko know whether he sold more

or less “*panty*” than goods he got in advance. With the second flight, global culture enters the tundra. Before the “*panty*” are loaded on the helicopter, the herders get the goods that they ordered. Anniko got this time a spare piston for his snowmobile, batteries for his Chinese tape recorder, some tapes with recent Russian disco music for his sons, canvas for his *chum* (nomadic tent) and ammunition for his gun. Moreover, he got some more food since he has run short of bread and tea. Herders insist that the “*panty*” are weighed with scales before they are loaded on the helicopter, to avoid cheating, they say. Anniko sold 300 kg, which equals 2/3 of the price of a buran (snowmobile), of which he already has two that do not work very well.

Normally, Anniko does not know the actual price of the goods he ordered and purchased. He trusts the entrepreneurs, because he knows them, and they know him. They are his only interface to the outside world, because only they know how the herders migrate and where they stand during “*panty*” cutting time. If one entrepreneur charges dishonest prices for Anniko, he will work with another one next year. This time it turned out that he took less products from the helicopter than he sold “*panty*”, which means that the trading enterprise has a debt to Anniko. He can take goods equal to this sum in early winter when he migrates to the trading post. He thinks that in recent years “*panty*” has become as important as a means of income as meat. This is why he slaughtered less male reindeer, resulting in a slightly higher share of males in his herd, since he does not want to cut antlers from his females. The fact that many herders made similar husbandry decisions lately resulted in what Anniko’s neighbour calls “the overcrowded tundra” (tundra perepolnilas’). Many young people think that living in the tundra as a reindeer herder, producing “*panty*” and meat, promises a better economic return than to live in the village with a badly paying job.

Once the “*panty*” are collected, Anniko and his family are happy, because at least for the rest of the summer they can live in peace until the slaughtering campaign begins in October. However, his son Nikolai mentions how the growing market competition over “*panty*” collection affects heavily their lives. In 2000, he says, during one month, eight helicopters flew to his camp in the tundra to ask for “*panty*”. This is because different enterprises compete with each other for the velvet antlers of one and the same household and Anniko decided to give smaller

amounts of “*panty*” to each of these enterprises. Nikolai welcomes this development. He says in the best cases prices of goods get lower when more competition starts. Anniko, his father, however, complains about how much work it is, so that he and his wife do not succeed in repairing sledges, tent covers, clothes, harnesses and the like. In general, the summer has become too hectic, which is why they decided to give “*panty*” only to two enterprises next year.

4. How “*panty*” enter the global economy

Once the “*panty*” are collected, the entrepreneur flies them to his base village and puts them in a natural freezer, which is an underground ice chamber in the permafrost. Here, the “*panty*”, according to the rules, have to be kept frozen for 20 days. After this period, Anniko’s and other’s “*panty*” are shipped to one of three centers for processing “*panty*”. This is where the headquarters of the vertically integrated reindeer enterprises are located.



Fig. 2: In 2000, 30 Tons of “*panty*” are shipped from northern Yamal to the processing plants in the south.

When the “*panty*” arrive in the south, they can already be unfrozen, and have to be put for about four hours in a dry heating room of 70–72 degrees (Iudin 1993:71). Afterwards, they are put in a wind dryer for 24 hours. This process is repeated until the material is dry. In other cases, however,

the fresh frozen “*panty*” are shipped to Moscow for processing. There are numerous ways for this material to reach the destination market in East Asia.

When the “*panty*” are cut, a herder such as Anniko gets the equivalent of app. 150 Russian Rubles per kg, being 5 \$ (in 2002). Then, the collecting enterprise has several possibilities:

- shipping to Moscow as they are (frozen wagon/ container), getting a maximum of 30 \$ per kg from Chinese or Korean businessmen, who organise the drying and shipping to their home country;
- organising transport only to the village, and there selling it to the first middleman for 10–15 \$. This middleman organises transport by train to Moscow, and gets 30 \$ per kg from the Korean or Chinese trader;
- organising transport to the regional centre Salekhard, there drying and processing the “*panty*”, and then selling it for 60 \$ per kg to an Asian trader who comes to Salekhard himself and organises transport directly to China. This is the way the first “*panty*” were traded in 1910. The Chinese came right to the place where the “*panty*” arrived from the tundra and bought them for cash.

The local trader can also organise the transport of the dry “*panty*” to Moscow and sell it to an Asian businessman there for 60 \$.

Both options “economise” middlemen and promise more profit, since the initially processed material is sold instead of the raw material. Therefore, recently a second “unofficial” drying facility opened in Salekhard.

I want to draw attention to the fact that cash money enters the antler business only after the material has been shipped to the centre in Salekhard. As soon as the “*panty*” leave the control of the collecting enterprise, the raw material becomes a commodity. In Moscow, the “*panty*” business is highly flexibly and unstable. The enterprise bringing “*panty*” to Moscow calls the phone number of a private house, normally where Koreans or Chinese live. He announces that he has a certain amount of “*panty*” to sell right on the spot. He gets a call back from a Korean or Chinese businessman, who then comes to meet him and pays for the “*panty*” right away in cash. This businessman normally does not disclose his identity, nor does he give his own phone number. He organises shipping to his home country, along unofficial trading routes in order to avoid problems with taxes and border guards (bribing increases the costs). In China or Korea he sells the “*panty*” again either as extract for medicine,

or chips for restaurants. Unfortunately, from the point when the “*panty*” arrive in Moscow, we know almost nothing about the further trade lines. These are dominated by mafiotic structures, which change very quickly.

5. *The nature of entrepreneurship in the “panty” business*

In this section I would like to look in a more abstract way at the categories of entrepreneurs in this business. I suggest that this is a case, where a new kind of native entrepreneurship develops, which engages in all trading areas of the business. Caroline Humphrey (1999) introduced a typology of post Soviet traders and entrepreneurs, which provides a good framework to understand how various people differ who make money from “*panty*”. Therefore I give a short summary of her main argument here: A general characteristic of trade in Post Soviet provincial Russia is the importance of what Humphrey called “trust networks” (1999:45). These imply that more important than official business relations are informal social contacts, often hidden from the outside world, between the partners of a trade relationship. Since “*panty*” trade works with very broad ranges of profit, and is mostly on the fringes of legality, these networks have a crucial impact on the “*panty*” economy. The common term in Yamal and elsewhere in Russia for traders is *kommersant*. The only overarching definition applicable everywhere in Russia is that “traders” are “those who aim to profit from middlemen activities involving goods and services” (Humphrey 1999:24). Humphrey (1999:38) thinks of *kommersanty* as “trader retailers”, who can afford transport, buy local products in the villages (or in the tundra) and sell vodka and other goods. These traders in Yamal make up only a small portion of the phenomenon which is referred to as *kommersant*. The main type of traders are defined as ‘shuttlers’ by Humphrey, non-locals traveling to foreign countries to bring in all kinds of products for sale (Humphrey 1999:19). The source of their profit is the price difference between the place where they obtain their products and where they sell them (*ibid.*:44). Additionally, Humphrey introduces four other categories of traders in Russia; the small scale resellers (*perekupshchiki*), (inside the borders); entrepreneurs (*predprinimateli*); brokers (former *snabzhentsi*), who have an intimate knowledge of the production and producers, having a rather modest profit range; and businesspeople, who can also invest in production, but are typically engaged in buying and selling waste, metals, cars and the like (Humphrey 1999:34–38).

Humphreys main point concerning all these categories is that traders controlling the market always come from outside the region, and have no interest in the region as such. Their only incentive for going there is the difference in prices between the places.

In Yamal, a kind of *kommersant* developed with the “*panty*” economy that does not fit with this pattern, but combines all of these categories into one, namely because these traders are local, they are indigenous, most of them have direct kinship ties to the tundra reindeer herders, and they are engaged in the “civil society of reindeer herders”. When I did fieldwork, there were 3–4 enterprises that controlled the Yamal “*panty*” economy completely. All their bosses are well educated Nentsy, having worked in the *sovkhoz* headquarters in different position. The job of a leading zootechnician³, the person responsible for husbandry decisions and for the health of the reindeer herds is the ideal starting point for a career as a local *kommersant*. They were not satisfied by the poor performance of *sovkhozy* after *perestroika*, felt themselves overqualified for a job with few prospects. Having worked together with reindeer herders all their working life, in younger years spending entire seasons on the tundra with the herds, these people have all the knowledge required concerning quality of reindeer products and the organization of the nomads’ mobility. On the other hand, having worked in the *sovkhoz* headquarters, they have also built up networks with markets in cities which are interested in reindeer products, offering goods in exchange. This is mainly why natives have the possibility to control the reindeer herding business.

For these peoples, the definition of a trader, implying that he is not engaged in production (Humphrey 1999:44) does not work. The border between ‘trader’ and ‘producer’ is not strict at all, and the bosses of these enterprises frequently are rich reindeer owners themselves. Equally blurry is the border between the barter and cash economy; in most cases cash enters at some stage between shipping the “*panty*” from the village to a processing facility and selling it to the next middleman. These traders are not outsiders, but have to be locals, because specific knowledge of the local

³ Sovkhoz is the state farm system introduced all over the Soviet Union in Agriculture. It was the primary institution in reindeer herding from the 1950s until the collapse of the Soviet Empire, and in some regions still functions very similar to its Soviet predecessor. The zootechnician used to be a very important figure in Soviet reindeer herding, having agricultural and veterinary education, being responsible for the health and migration routes of the herds. After the Soviet Union, the importance of these people was largely ignored, which resulted in their dissatisfaction. Therefore, many searched for alternative occupations.

producing market is necessary from the very beginning of the business. This knowledge serves as the key to enter this specific niche in the market. For entering it, the first resource is access to the transport infrastructure, which requires one to know the “lords of the transport”, e. g. the regional administration, the boss of the air cargo company, some leading pilots, and the owners of the kerosene supply. But even having obtained a means of transport, in the best case a helicopter, does not help a lot, if the trader does not know the migration routes of the herders, or the location of the slaughtering corrals in a specific region. In Anderson’s (2000) words, the entrepreneur working with reindeer herders has to “know the land”, otherwise he will not be able to find particular herders and their herds in the wide arctic tundra. This is why the trading pattern described by Humphrey ends at the gates to the tundra, in the villages.

This expertise which is needed for the “*panty*” business cannot be bought so easily with money, but is obtained more through building up friendships and “trust networks”. I remember a trader from Moscow coming to a reindeer herding village where I stayed, who wanted to make money in the “*panty*” business. With an arrogant approach he wanted to pay natives for giving him access to people who know the land, and the location of herders in “*panty*”-time. He was defeated, because nobody would agree to work with this capitalist even for good money. Russian and Nentsy both were proud of themselves, stressing their solidarity in the North, where at least in certain spheres networks of solidarity count more than a bunch of dollars.

The Yamal example shows that barter networks do not – as Humphrey pointed out (1999:45) – undermine trading, they are in contrary necessary for starting it. Having started in the mid 1990s, in the meantime the three major local reindeer entrepreneurs have developed into vertically integrated reindeer herding enterprises. They engage in all aspects of the business from owning the animals, sawing the fresh antlers, collecting them by helicopter, trading goods for antlers with the reindeer herders, freezing them, drying them, cutting them into chips, and taking them to Moscow where they sell them to Korean traders. They also organize the autumn slaughtering of animals, processing the meat, and selling it on the market. Conceptually, their asset is that they know both sides of the tundra/ city border, as well as that of the barter/ cash border. In an evolving market economy, which is characterized by a high number of middlemen in the

economic, chain from the producer to the consumer, such a vertical integration is highly exceptional. It allows the local enterprises to control the access to the tundra, building up a gate in the exchange relations between the tundra economy and the capitalist economy of 21st century Russia.

6. *The position of herders in the business*

Most models of world system or dependency theory assume that once the periphery starts to become integrated into the global economy, the population experiences marginalisation and exploitation (Meillassoux 1981: 110–115, Frank 1978, Wallerstein 1989). Indeed to exchange one kg of “*panty*” for 5 \$, when it is sold for 30 \$ or 60 \$ looks rather exploitative. However, it is still the herders themselves who decide with whom they will work. In a survey of 25 reindeer herding households in Yamal in 2000–2001, almost all answered that they feel free to choose of their trading partners for the “*panty*” business. Most of them act pragmatically, diversifying risks and working with all enterprises coming to collect “*panty*”. If they feel that the goods offered are not favourable for them, they will complain or they will not work with them the next year.

Reindeer herders show surprisingly little interest in obtaining cash for their “*panty*” or meat. They say in the tundra, there are no stores and shops anyway, and they feel more comfortable ordering things from knowledgeable people whom they trust, rather than leaving the tundra and their herds too often. Therefore the local vertically integrated enterprises exchange the cash that they receive for the “*panty*” for goods, which they then bring to the herders in helicopters. So cash is needed for an enterprise to purchase better and fresher goods, but not to start doing business with the reindeer herders. This challenges the assumption that barter is a major obstacle for the development of a market. On the contrary, many primary producers in this sphere (herders) will not even start selling their products for money.

Fitting to this cashless exchange is my observation that herders are inclined to work with relatives or neighbours engaged in this business. Apart from enterprises in villages, which are building up gates to access the tundra, we also have what has been called a “social boundary defence” (Cashdan 1983:49, Casimir 1992a) among the herders: Those who do not belong to the group are prohibited from doing the business with particular reindeer herders, even though they might have crossed the gate. Gudeman

(1998, 2001) has conceptualised this two fold notion of exchange as the “community” sphere and the “market” sphere. In both spheres goods are exchanged, but in the tundra, the “community” sphere is dominant, and pure market relations, let alone a cash economy, do not work. This does not mean that the herders do not gain wealth from this business. It only means that there is a clear notion of non-economic behaviour to be performed in order to get access to the community. Because of this difference between community and market, the border of which is the village, the tundra dwellers have not become the marginalized producers of a neo-liberal world economy that would be assumed by world system analysis. In Evers’ words (1996:169), the “*panty*” economy among Yamal reindeer herders shows a “hybridisation” of subsistence and the global economy. In this connection between the “global” and the “local”, we see the proof against a widespread evolutionary assumption that we have subsistence economies in “pre-modern” societies, whereas commodity exchange takes place in the global economy. Evers (1996) points out that both can occur in one society, and at the same time.

The income from this new commodity changes the economic world-view of the reindeer herders. From a market point of view, producing “*panty*” is much more profitable than producing meat, but still this new commodity has neither become the only, nor even the major economic activity of the reindeer herders.

One reason for this is the reputation of “*panty*” cutting among the Nentsy. Only a tiny minority of the herders interviewed claimed that cutting “*panty*” does not affect the health of the reindeer, as is stated in earlier literature (Iudin 1993). Although this did not prevent many from cutting, they were aware that the animals might become weaker from the cutting, which affects their transport capacity, they become more vulnerable to mosquitoes, and less competitive in fresh pastures. This leads according to herders to a certain loss of the physical quality of the herd. This possible negative effect on the reindeer is one reason for the bad reputation the “*panty*” production has among reindeer herders. The second, and possibly more important reason, is the perception of the “*panty*” business as a highly risky and an unreliable source of income. Reindeer herders have seen the first enterprises, one run by an Armenian and another by a Khanty businessman bankrupting, after they had given their product to the trader but had not yet received their goods in exchange. Therefore

many think it is better not to rely too much on income from this commodity. They would rather diversify their production towards producing both meat and “*panty*” simultaneously.

Extensively cutting “*panty*”, year by year, enables them to obtain goods that had not entered the tundra before. Interestingly enough, these are mostly goods going beyond the basic needs, such as fresh bread, spices from Caucasus, fruits, and items for leisure times, tape recorders, music and the like, as well as expensive equipment such as snowmobiles. Income from “*panty*” enables the herders to increase their standard of living beyond the needs of survival. We have seen in Anniko’s example that a household with a normal size herd can cut more than 200 kg of “*panty*” per year, which is half the price of a snowmobile. Some of them buy a snowmobile every second year, e. g. to equip their boys, just as snobbish German school children get a car for their “abitur” or their 18th birthday.

This clear cut difference between basic needs and non-essential needs allows us to conceptualise “*panty*” income as a sort of special purpose money, but not in the way of Hutchinson (1996), where a low prestige business such as carrying the excrements of the rich to the waste deposit generates only low prestige income that cannot be spent for “noble” purposes. It is more that even though income from “*panty*” is seen as unhealthy for the reindeer economy, it is used to improve the standard of living beyond the basic needs. I would compare this with the position of stock exchange incomes in some western settings. The “*panty*” market is also seen as hectic, unstable, and full of dishonest people, just as the stock exchange. Therefore people do not rely too heavily on this income for their everyday life. This is why the backbone of the reindeer economy in Yamal is still meat production, as it was during the last 100 years. Counting too much on “*panty*” income means investing in an unpredictable branch of the economy. This is one reason the old habits of reindeer herding do not change so rapidly. However, in spite its bad reputation, cutting “*panty*” is still seen as a legitimate source of income, and as Pine (2002:77) has pointed out for Poland “almost any means of obtaining it [money] is legitimate”. Perhaps “*panty*” for the herders expresses best their quest for the incorporation of their nomadic economy into world capitalism without becoming detached from the social processes within their communities.

7. *Summary*

This contribution has illustrated the process of economic integration of a remote arctic community into an international trading network.

Drawing on ethnography of the developing velvet reindeer antler business between Korean or Chinese customers, Russian traders and Nentsy reindeer herders, I argued that market integration and commoditisation does not always have to be accompanied by a marginalisation of nomads or a change of social strata among them. On the background of recent world system studies I also show that the integration in the world economic system is not mutually exclusive with subsistence.

I argued that the Nentsy could succeed to organise their engagement with new commodities after 1990 by influencing the conditions for business with outsiders. This is done by controlling access to the place of production, the reindeer pastures of the West Siberian Tundra. Access is gained only through cooperation with one of the vertically integrated reindeer production enterprises that were established by native local traders. They organise the production of the raw material, the cutting, packing, storing, shipping and drying of 'velvet' reindeer antlers, before they sell it to Russian traders, who again sell it to some more or less reliable customers from China or Korea. In exchange for this material, Nentsy traders receive hard currency income, which enables them to provide a whole range of new imported products to the tundra. This is how reindeer herders get access to consumer goods of the global economy, such as Chinese tape recorders, American instant soups, ketchup, and Japanese snowmobiles or power stations.

I argued that in spite of the significant flow of commodities between the 'nomadic' and the 'sedentary' space, the borders between these two 'worlds' are still significant, and the reindeer herders still see their engagement with the commodity economy as supplementary to their subsistence and production of meat for local markets. The split between two items of economic exchange – antlers and meat – even is mirrored by a split of expenditures. Income from meat and fur production is spent to satisfy the basic needs, whereas income from the antler business is used for "luxury" goods not necessary for survival. This finding links to recent anthropological works about the meaning of money as an item of generalised exchange versus 'special purpose money' (see Pine 2002, Parry & Bloch 1989). Although the antler business has a somewhat bad reputation be-

cause it is thought to be bad for the health of the animals, the income gained from it is not stigmatised as ‘dirty money’ among reindeer herders. However, since they know that this is a business which involves many adventure capitalists and Mafiosi, herders know that they should not rely on it too much.

Ethnographic material from northwest Siberia allows us to understand the process of commoditisation in a nomadic community from the very beginning, since it started only in the 1990s. It provides fresh insights of how people in a seemingly remote community engage in global markets without sacrificing their distinguished culture based on nomadic herding of domestic reindeer. At the same time it is also an argument for the highly adaptive characteristics of a nomadic community. They are responding to transformations in the world around them by meeting the demands of a newly developed market, just as many other economic actors in the post-socialist period did with varying success.

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